

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Original): A back illuminated photodetector comprising:

a first conductive type semiconductor substrate;

a second conductive type impurity semiconductor region provided in the first superficial surface layer of said semiconductor substrate;

a recessed portion for incidence of to-be-detected light formed in the second surface of said semiconductor substrate and in an area opposite said impurity semiconductor region;

a coating layer made of resin for transmitting said to-be-detected light to said recessed portion and having a substantially flat surface, said coating layer being provided on the second surface; and

a window plate provided on said surface of said coating layer to transmit said to-be-detected light to said coating layer.

Claim 2 (Original): The back illuminated photodetector according to claim 1, wherein

said coating layer consists of a first resin layer provided on the second surface and a second resin layer provided on said first resin layer and having a substantially flat surface on the opposite side of said first resin layer, and wherein

said first resin layer is arranged in such a manner that the portion provided on said recessed portion in the second surface is sunk lower than the portion provided on the outer edge portion of said recessed portion.

Claim 3 (Original): The back illuminated photodetector according to claim 1 or 2, further comprising a supporting film provided on the first surface of said semiconductor substrate to support said semiconductor substrate.

Claim 4 (Original): The back illuminated photodetector according to Claim 3, further comprising a filling electrode penetrating through the supporting film and connected electrically to the impurity semiconductor region at one end thereof.

Claim 5 (Currently amended): The back illuminated photodetector according to claim 1 ~~any of claims 1 to 4~~, wherein said window plate has a square cross-sectional shape with at least one corner being chamfered in a plane perpendicular to the thickness direction thereof.

Claim 6 (Currently amended): The back illuminated photodetector according to claim 1 ~~any of claims 1 to 5~~, wherein a highly-doped impurity semiconductor region with impurities of said first conductive type added thereto at a high concentration is exposed across the entire side surface of said semiconductor substrate.

Claim 7 (Currently amended): The back illuminated photodetector according to claim 1 ~~any one of Claims 1 to 6~~, wherein a highly-doped impurity semiconductor layer with impurities of the first conductive type added thereto at a high concentration is provided in the bottom portion of the recessed portion within the second superficial surface layer of the semiconductor substrate.

Claim 8 (Currently amended): The back illuminated photodetector according to claim 1 ~~any of claims 1 to 7~~, wherein a highly-doped impurity semiconductor layer with impurities of said first conductive type added thereto at a high concentration is provided in the second superficial surface layer in the outer edge portion of said semiconductor substrate.